



2661  
PATENT

Case Docket No. IMEC210.001AUS  
Date: November 2, 2001

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant(s) : Deneire, et al.  
Appl. No. : 09/871,571  
Filed : May 30, 2001  
For : A METHOD AND  
APPARATUS FOR  
CHANNEL ESTIMATION  
Examiner : Unknown  
Group Art Unit : 2661

I hereby certify that this correspondence and all  
marked attachments are being deposited with the  
United States Postal Service as first class mail in an  
envelope addressed to: Assistant Commissioner for  
Patents, Washington, D.C. 20231, on

November 2, 2001

(Date)

Mark M. Abumeri, Reg. No. 43,458

TRANSMITTAL LETTER

ASSISTANT COMMISSIONER FOR PATENTS  
WASHINGTON, D.C. 20231  
ATTENTION: APPLICATION BRANCH

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Dear Sir:

Enclosed for filing in the above-identified application are:

- (X) A Power of Attorney Form and Copy of Assignment.
- (X) The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment, to Account No. 11-1410.
- (X) Return prepaid postcard.

Mark M. Abumeri  
Registration No. 43,458  
Attorney of Record



PATENT

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ESTABLISHMENT OF RIGHT OF ASSIGNEE TO TAKE ACTION  
AND  
REVOCATION AND POWER OF ATTORNEY

Assistant Commissioner for Patents  
Washington, D.C. 20231

Dear Sir:

The undersigned is empowered to act on behalf of the assignees below (the "Assignees"). A true copy of the original Assignment of the above-captioned application from the inventor(s) to the Assignees is attached hereto. This Assignment represents the entire chain of title of this invention from the Inventor(s) to the Assignees.

I declare that all statements made herein are true, and that all statements made upon information and belief are believed to be true, and further, that these statements were made with the knowledge that willful, false statements and the like so made are punishable by fine or imprisonment, or both, under 18 U.S.C. § 1001, and that willful, false statements may jeopardize the validity of the application, or any patent issuing thereon.

The undersigned hereby revokes any previous powers of attorney in the subject application, and hereby appoints the registrants of Knobbe, Martens, Olson & Bear, LLP, 620 Newport Center Drive, Sixteenth Floor, Newport Beach, California 92660, Telephone (949) 760-0404, **Customer No. 20,995**, as its attorneys with full power of substitution and revocation to prosecute this application and to transact all business in the U.S. Patent and

App. No. : 09/871,5  
Filed : May 30, 2001

Trademark Office connected herewith. This appointment is to be to the exclusion of the inventor(s) and his attorney(s) in accordance with the provisions of 37 C.F.R. § 3.71.

Please use **Customer No. 20,995** for all communications.

Interuniversitair Micro-Elektronica Centrum

Dated: \_\_\_\_\_

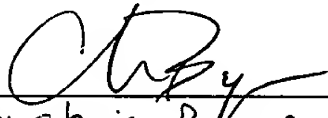
By: \_\_\_\_\_  
Gilbert Declerck

Title: President

Address: Kapeldreef 75, B-3001 Leuven, Belgium

National Semiconductor Corporation

Dated: \_\_\_\_\_

By:   
Name: Chris Byrne

Title: Director of IP & Technology  
Licensing

Address: 2900 Semiconductor Drive, Santa Clara,  
CA 95051, USA

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PATENT

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## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

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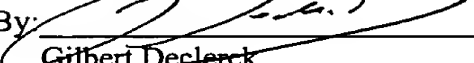
App. No. : 09/871,571  
Filed : May 30, 2001

revocation to prosecute this application and to transact all business in the U.S. Patent and Trademark Office connected herewith. This appointment is to be to the exclusion of the inventor(s) and his attorney(s) in accordance with the provisions of 37 C.F.R. § 3.71.

Please use **Customer No. 20,995** for all communications.

Interuniversitair Micro-Elektronica Centrum

Dated: \_\_\_\_\_

By:   
Gilbert Declerck

Title: President

Address: Kapeldreef 75, B-3001 Leuven, Belgium

National Semiconductor Corporation

Dated: \_\_\_\_\_

By: \_\_\_\_\_  
Name:

Title:

Address: 2900 Semiconductor Drive, Santa Clara,  
CA 95051, USA

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PATENT

Application No.: 09/871,571  
Filing Date: May 30, 2001

Client Code: IMEC210.001AUS  
Page 1

## ASSIGNMENT

Baanckkerweg 3, 3060 Bertem

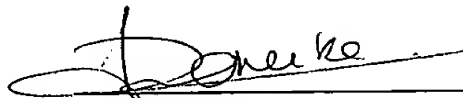
WHEREAS, We, Luc Deneire, a citizen of Belgium, residing at Rue du Rivage 7, Mélin, BELGIUM, and Patrick Vandenameele, a citizen of Belgium, residing at ~~Parkstraat 6, 3000 Leuven~~, BELGIUM, have invented certain new and useful improvements in a A METHOD AND APPARATUS FOR CHANNEL ESTIMATION for which we have executed an application for Letters Patent in the United States, having Application No. 09/871,571, filed on May 30, 2001;

AND WHEREAS, Interuniversitair Micro-Elektronica Centrum, a Belgium Corporation, with its principal place of business at Kapledreef 75, B-3001 Leuven, BELGIUM, and Naional Semiconductor Corporation, with its principle place of business at 2900 Semiconductor Drive, Santa Clara, CA 95051, USA any, (hereinafter "ASSIGNEES"), desire to acquire the entire right, title, and interest in and to the said improvements and the said Application:

NOW, THEREFORE, in consideration of the sum of One Dollar (\$1.00) to me in hand paid, and other good and valuable consideration, the receipt of which is hereby acknowledged, we, the said inventors, do hereby acknowledge that we have sold, assigned, transferred and set over, and by these presents do hereby sell, assign, transfer and set over, unto the said ASSIGNEES, their successors, legal representatives and assigns, the entire right, title, and interest throughout the world in, to and under the said improvements, and the said application and all divisions, renewals and continuations thereof, and all Letters Patent of the United States which may be granted thereon and all reissues and extensions thereof, and all rights of priority under International Conventions and applications for Letters Patent which may hereafter be filed for said improvements in any country or countries foreign to the United States, and all Letters Patent which may be granted for said improvements in any country or countries foreign to the United States and all extensions, renewals and reissues thereof; and we hereby authorize and request the Commissioner of Patents of the United States, and any Official of any country or countries foreign to the United States, whose duty it is to issue patents on applications as aforesaid, to issue all Letters Patent for said improvements to the said ASSIGNEES, their successors, legal representatives and assigns, in accordance with the terms of this instrument.

AND WE HEREBY covenant and agree that we will communicate to the said ASSIGNEES, their successors, legal representatives and assigns, any facts known to us respecting said improvements, and testify in any legal proceeding, sign all lawful papers, execute all divisional, continuing and reissue applications, make all rightful oaths and generally do everything possible to aid the said ASSIGNEES, their successors, legal representatives and assigns, to obtain and enforce proper patent protection for said improvements in all countries.

06 Sept 2001  
Date

  
Luc Deneire

13 sept 2001  
Date

  
Patrick Vandenameele